

WHAT IS CLAIMED IS:

1. An automatic headlight axis direction control system for a vehicle comprising:

a vehicle information detection means for detecting information of a vehicle;

a control angle calculation means for calculating a light axis control angle to adjust a light axis direction of a headlight on a basis of the detected information;

a light axis direction adjustment means for adjusting the light axis direction of the headlight on a basis of the calculated light axis control angle;

a direction detection means for detecting the light axis direction of the headlight; and

a failure detection means for detecting a failure in the light axis direction adjustment means on a basis of the detected light axis direction from the position detection means when the light axis direction adjustment means is driven before the light axis control is started.

2. The automatic headlight axis direction control system as in claim 1 further comprising:

a failure dealing means for dealing with the failure in the light axis direction adjustment means.

3. The automatic headlight axis direction control system as in claim 1,

wherein the failure detection means is operable in

response to an engine starting operation.

4. The automatic headlight axis direction control system as in claim 3,

wherein the failure detection means is operable in response to an engine ignition switch operation.

5. The automatic headlight axis direction control system as in any one of claim 1,

wherein the failure detection means forcibly drives the light axis direction adjustment means to a predetermined direction irrespective of the calculated light axis control angle and compares the detected light axis direction with the predetermined direction.

6. A method of automatically controlling headlight axis direction of a vehicle having a headlight, comprising steps of:

determining a failure detection time point which precedes lighting operation of the headlight;

driving the headlight to a predetermined headlight axis direction at the failure detection time point;

detecting an actual headlight axis direction of the headlight driven by the driving step; and

detecting a failure of a headlight system when the detected actual headlight axis direction differs from the predetermined headlight axis direction.

7. The method of automatically controlling headlight axis direction as in claim 6,

wherein the determining step starts in timed relation with an engine starting operation.

8. The method of automatically controlling headlight axis direction as in claim 7,

wherein the determining step starts in timed relation with an engine ignition switch operation.

9. The method of automatically controlling headlight axis direction as in claim 6,

wherein the driving step drives the headlight to two limit angles as the predetermined headlight axis direction.

10. The method of automatically controlling headlight axis direction/as in claim 6, further comprising steps of:

detecting vehicle information;

calculating a headlight axis direction variable with the detected vehicle information when a headlight operation is needed and the failure detecting means detects no failure; and

driving the headlight to the calculated headlight axis direction.

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